

KEPONE OPERATIONS
BALTIMORE AGRICULTURAL PLANT
ALLIED CHEMICAL CORPORATION

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SP36

Small Air Mill

In this facility technical grade Kepone, together with wetting agents and clays, were blended in a ribbon blender, given a pre-grind through a hammer mill, blended, and then air milled. The product was after-blended in a third ribbon blender and packaged. Process has a rated capacity of 600-1000 pounds per hour of product dependent on the types of diluents used. Equipment was not used exclusively for Kepone, but for a number of products. Kepone products were 80% Concentrate and 50% Wettable Powder.

The No. 1 ribbon blender is vented to a bag type collector⁽¹⁾. The second blender and the air mill vent to same bag collector. The packing machine feed hopper vents to the foregoing bag collector through an older bag dust collector. Flow Diagram is shown as Figure No. 1.

Miscellaneous Agricultural Dust Plant

This facility was used to prepare 5% Kepone dust (agricultural material to be applied by dusting), 25% Special Mix, 4% Mix and 10% Mix. In this facility the dry technical materials were fed into a ribbon blender with inerts and blended. The product was ground through a hammer mill to a typical specification of 95% through 325 mesh. Products were packaged in 50 lb. drums and bags and smaller packages. The capacity on a daily basis was about 5 N.T. utilizing a one-shift operation.

The ribbon blender was vented to a bag collector. The packaging feed hopper and the packaging machine are vented to same bag collector. A Flow Diagram showing the processing equipment is attached as Figure No. 2.

Pellet Plant

Kepone bait pellets containing 0.125% Kepone were produced in this plant. Technical grade insecticides (Kepone or other) are sprayed onto a mixture of inerts and attractants, blended, then pelletized. The finished pellets were screened and normally packaged in 5 lb. and 25 lb. drums. The through-put was estimated at about 9 N.T./day using a three-shift operation. The pellet facility was used primarily to prepare Mirex or Kepone pellets.

In producing Kepone pellets, 45% protein peanut meal (ground)

NOTE: (1) All dust collectors have been registered and stack sampling results reported to the State Bureau of Air Quality.

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June of 1970. At that time and continuing until about November 1975 (when operations ceased), the washwater would be dumped into a steel-lined pit, pumped to one of two evaporating tanks (8,000 gallons each) and slowly evaporated, leaving the sediment in the tank. The waste from the evaporation tanks was placed into 55 gallon drums. None of the drums were shipped off site; 190 drums are in storage at this plant at the current time.

Effluent control facilities installed at the Baltimore Plant since 1969 are as follows:

<u>Year</u>	<u>Item</u>
1969	Set up 8,000 gallon concentrating tank. Installed 200 gallon settling basin, prior to pumping to tanks. Ran steam lines for concentrating solution. Installed 3" water line to arsenic acid plant for extra cooling capacity.
1970	Installed 6" concrete curb around #3 Air Mill for containment of washouts.
1971	Installed second 8,000 gallon concentrating tank and water line to concentrating tanks. Paved area around arsenic acid control room.
1972	Diked area around concentrating tanks. Diked chromated copper arsenate tanks.
1973	Diked arsenic acid plant. Paved arsenic acid track area. Replaced #3 and #4 arsenic acid storage tanks. Rerouted south drain to center drain to have one outfall. Diked around new CCA storage tank.

Relative to the volume of waste water produced on equipment clean-out, it is estimated that each clean-out produced about 500-1000 gallons of waste water. This waste contained an estimated 10-30 pounds of product. There are no data available on which washout frequency could be estimated. It is believed that both facilities were washed a total of about 6-15 times per year. Frequency varied considerably year to year, depending on product demand.

The only known spill of Kepone containing material to the River occurred on April 27, 1972. At that time, there was a discharge